



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,594	03/30/2004	Dylan S. Van Atta	005127.00356	5894

22910 7590 11/27/2006

BANNER & WITCOFF, LTD.
28 STATE STREET
28th FLOOR
BOSTON, MA 02109-9601

EXAMINER

MORAN, KATHERINE M

ART UNIT	PAPER NUMBER
----------	--------------

3765

DATE MAILED: 11/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/814,594	Applicant(s) VAN ATTA ET AL.	
	Examiner Katherine Moran	Art Unit 3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 5-17 and 22-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicant's amendment of 9/22/06 has been received and reviewed. Applicant amended claim 1, with claims 1-26 pending and claims 5-17 and 22-26 withdrawn as non-elected. Applicant also submitted an amendment to the specification.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Robertson (U.S. 4,134,155). Robertson discloses the invention as claimed. Robertson teaches a swim cap comprising a first portion 14 configured to cover at least a portion of a crown of a user's head and having a first durometer, and a second portion 16 secured to and overlaying the first portion and having a second durometer which is smaller than the first durometer. Robertson teaches that the first portion is formed from impact protective plates of fiberglass reinforced plastic or KEVLAR. The second portion is formed from fire resistant material such as Nomex or PBI. The second portion entirely covers the first portion and extends beyond a peripheral edge of the first portion 14 as shown in Figure 1. The first portion has a larger durometer than the second portion.

3. Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee (US 2002/0133866). Lee discloses the invention as claimed. Lee teaches a cap which could be used for swimming comprising a first portion 12 or 22 formed from PET, configured to cover at least a portion of a crown of a user's head and having a first durometer, and a second portion 18 secured to and overlaying the first portion, and having a smaller durometer than the first durometer. The second portion entirely covers the first portion and extends beyond a peripheral edge of the first portion.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson in view of Andrews (U.S. 2,664,569). Robertson discloses the invention substantially as claimed. However, Robertson doesn't teach an outer peripheral portion of the second portion has a thickness greater than a thickness of its inner portion. Andrews teaches a cap intended to be worn while swimming, with the outer peripheral portion 11 having a thickness greater than that of its inner portion in order to prevent water seepage into the cap. Therefore, it would have been obvious to provide Robertson's outer peripheral portion with a greater thickness in order to prevent water seepage inside the cap.

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Ewing et al. (Ewing, U.S. 2002/0184699). Lee discloses the invention substantially as claimed. However, Lee doesn't teach the first portion formed of PETg. Ewing teaches a plastic portion formed from PETg and teaches that PETg has excellent impact strength and durability. Therefore, it would have been obvious to substitute the PETg as taught by Ewing for the PET, because this would provide a superior impact-resistant and durable property to Lee's cap.

7. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson in view of Kenning et al. (U.S. 5,537,667). Robertson discloses the invention substantially as claimed. However, Robertson doesn't teach the second portion formed of silicone. Kenning teaches a silicone swimming cap. Silicone is known as a synthetic rubber with superior resilience and water resistant properties and can be formed as a rigid or soft polymer. Applicant's specification teaches that any soft, flexible, stretchy material is deemed suitable for the second portion and any relatively stiff, pliable material is suitable for the first portion, and further, does not provide criticality for employing one particular material over another as long as the material has the desired properties. Therefore, it would have been obvious to form Robert's second portion from silicone in order to provide improved water-resistant and resiliency properties to the first or second portion.

8. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson in view of Gregg (U.S. 3,979,777). Robertson discloses the invention substantially as claimed. However, Robertson doesn't teach the second portion is

formed from latex. Gregg teaches a swimming cap with a second portion formed from latex rubber to more closely conform to the contours of a wearer's head. Applicant's specification teaches that any soft, flexible, stretchy material is deemed suitable for the second portion and does not provide criticality for employing one particular material over another as long as the material has the desired properties. Therefore, it would have been obvious to form Robert's second portion from latex in order to provide improved water-resistant properties to the second portion.

Response to Arguments

9. Applicant's arguments, filed 9/22/06 with respect to the rejection(s) of claims 1-4 and 18-21 have been fully considered. Applicant submits that Robertson fails to teach a second portion 16 formed of a flexible material configured to tightly conform to a user's head. The Examiner respectfully disagrees and offers that the helmet unit is described as being "flexible and lightweight" in column 3, lines 16-19. Further, the portion 16 is flexible to a degree since Robertson teaches that the material is formed from Nomex, PBI, or Kynol which are typically available in sheet or fiber form. The portion 16 conforms tightly to a user's head to the degree disclosed by the Applicant's claims. It is noted that the fit of the cap is largely dependent on the size and shape of the wearer's head. It is clear in Figures 1-4 of Robertson that the portion 16 conforms tightly to the wearer's head. Regarding Lee, Applicant submits that Lee fails to teach a second portion 18 formed from a material with a smaller durometer than that of the first portion. It is known in the art that caps are typically formed from fabric material which is flexible.

Lee's invention attempts to solve the problem of wrinkling and crushing the crown portion of the cap during packaging and shipping by providing a first portion having a greater hardness than that of the second portion. The crown conforms to the wearer's head tightly to the degree disclosed by Applicant's claims.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications should be directed to Primary Examiner Katherine Moran at (571) 272-4990. The examiner can be reached on Monday-Thursday from 8:30 am to 6:00 pm, and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Calvert, may be reached at (571) 272-4983. The official and after final fax number for the organization where this application is assigned is (571) 273-8300.

General information regarding this application may be obtained by contacting the Group Receptionist at (571) 272-3700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kmm

November 21, 2006

A handwritten signature in black ink, appearing to read 'K Moran', with a long horizontal flourish extending to the right.

Katherine Moran

Primary Examiner, AU 3765